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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/189,334 11/09/98 POELKER

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EXAMINER

IM22/1228

HOWELL & HAFERKAMP  
7733 FORSYTH BOULEVARD  
SUITE 1400  
ST. LOUIS MO 63105

TUCKER, P

ART UNIT

PAPER NUMBER

1721

DATE MAILED:

12/28/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

## Office Action Summary

Application No.

189 334

Applicant(s)

POELKER ET AL.

Examiner

P. TUCKER

Group Art Unit

1721

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

### Status

- ☒ Responsive to communication(s) filed on 10/18/99
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

- ☒ Claim(s) 1 - 37 and 39 - 45 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1 - 37, 40 and 42 - 45 is/are rejected.
- ☒ Claim(s) 39 and 41 is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

### Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

### Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 14, 15, 17-20, 29, 30, 32, 34, 40 and 42-45 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fischer et al. (3682249).

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Fischer teaches an emulsion which comprises a polymeric crystal modifier and wax dispersant, which is used to inhibit wax deposition. Fischer teaches that the emulsion may be water external (column 6, lines 49-54), and can contain corrosion inhibitors and bactericides (column 10, lines 23-26). Water soluble surfactants which would have similar HLB to the present invention are utilized (column 7, line 65 - column 8, line 50). Furthermore, the use of "about 8" in the claim is rendered anticipated by the teaching of 7 for the HLB by Fischer (In re Ayers 69 USPQ 109, In re DeVaney 88 USPQ 97). The present invention is thus anticipated by Fischer.

It is not clear from Fischer that the composition has the same density and viscosity requirements as in the present claims. To the extent that Fischer may differ from the present invention, the optimization of the density and viscosity of the composition in order to achieve optimal wax deposition inhibition, would be an obvious design choice to one of ordinary skill in the art.

4. Claims 1-8, 14, 15, 17-23, 29, 30, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. (3682249) in view of McClaflin (4668408).

Fischer is taught in the previous paragraph. Fischer differs from the present invention in that the use of ethoxylated surfactants is not disclosed. McClaflin teaches the use of oil in water emulsions which comprise an ethoxylated alkyl phenol, a bactericide and corrosion inhibitor in the inhibition of wax deposition from a petroleum fluid. It would be obvious to one of ordinary skill in the art to use the ethoxylated alkyl phenol of McClaflin in the emulsion of Fischer, since the

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courts have held that the use of the combination of materials for the same purpose that they are taught as being individually useful in the prior art is not patentable (In re Kerkhoven 205 USPQ 1069, In re Pinten 173 USPQ 801, In re Crockett 126 USPQ 186).

5. Claims 1, 9-13, 16, 17, 24-28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer in view of McClafin as applied to claim 1-8, 14, 15, 17-23, 29, 30 and 33 above, and further in view of Karydas (4997580).

Fischer in view of McClafin is taught in the previous paragraph. Fischer differs from the present invention in that the specific use of an olefin-maleic anhydride copolymer is not disclosed. Karydas teaches that olefin-maleic anhydride and ethylene-vinyl acetate are commonly used as equivalent crystal modifiers in wax inhibitor compositions. It would be obvious to one of ordinary skill in the art to utilize olefin-maleic anhydride copolymer instead of the ethylene-vinyl acetate copolymer of Fischer, given the teaching of Karydas that such copolymers are used as equivalent crystal modifiers in wax inhibition compositions.

6. Claims 17 and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer (3682249) in view of French (5027901).

Fischer teaches an emulsion which comprises a polymeric crystal modifier and wax dispersant, which is used to inhibit wax deposition in oil recovery. Fischer teaches that the emulsion may be water external (column 6, lines 49-54), and can contain corrosion inhibitors and

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bactericides (column 10, lines 23-26). Fischer differs from the present invention in that the specific use of imidazoline corrosion inhibitors is not disclosed. French teaches that imidazolines within the scope of the present invention may be used as corrosion inhibitors in oil recovery. It would be obvious to one of ordinary skill in the art to utilize known corrosion inhibitors, such as the imidazolines of French, in the oil recovery process of Fischer, given the teaching of Fischer that corrosion inhibitors are useful therein.

### *Double Patenting*

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-37 and 40, 42-45 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-36 of U.S. Patent No. 5858927. Although the conflicting claims are not identical, they are not patentably distinct from

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each other because they claim the same aqueous external crystal modifier dispersion and method of utilizing said dispersion, thus rendering each set of claims obvious over one another.

9. Claims 39 and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Applicants arguments have been considered but are not deemed persuasive. Applicant has argued that Fischer is directed to oil external microemulsions and surfactants which would form them having an HLB of from 3-7. Applicant has limited the scope of discussion to certain parts of the specification without taking into account other parts therein. Thus Fischer teaches the formation of water external emulsions, and that different surfactants are used to obtain such emulsions (column 6, lines 50-55 and column 7 -column 8). The water soluble surfactants would clearly have different HLB values from those of the oil soluble surfactants. In fact, the reference applicant has submitted, Meaning of HLB Advantages and Limitations on page 17, show an HLB value of 10-12 for ionic alkyl sulfonates. Furthermore, the use of "about 8" in the claim is rendered anticipated by the teaching of 7 for the HLB by Fischer (In re Ayers 69 USPQ 109, In re DeVaney 88 USPQ 97). Applicant has stated that Fischer does not label the surfactant as a wax dispersant, and that it does not act as such. However, the surfactant must act as a wax dispersant,

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or else the wax would clump together on addition of water in forming the micellar dispersions. Applicants arguments with regard to the method of claim 17 is noted, however example 6 of Fischer clearly teaches the use of the dispersion as an additive to a petroleum reservoir. Since the same composition as that of the present invention is formed by Fischer, it would inherently have the same characteristics as that of claims 43-45. It is respectfully submitted that applicants arguments with regard to McClafin are not valid, since the surfactants taught by Fischer are not limited to those that have an HLB of 3-7. Applicants arguments with respect to French are also not valid, since French was used to teach the use of imidazoline compounds as a corrosion inhibitor and not as a substitute for the copolymer of the present invention.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.




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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tucker whose telephone number is (703) 308-0529. The examiner's normal working hours are 7:30am-4:00pm, Monday-Friday. If necessary SPE Gabrielle Brouillette may be contacted at 703-308-0756. For inquiries of a general nature call the receptionist at 703-308-0651. The group FAX no. is 703-305-5408. The **after final** fax no. Is 703-305-3599.

PCT-1954  
December 21, 1999

  
**PHILIP C. TUCKER**  
**ART UNIT 1721**